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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/764,717  | 01/26/2004  | Martin Blaze         | CUNO-330.2          | 8658             |
| 45017   | 7590        | 12/07/2005           | EXAMINER            |                  |
| CUNO INCORPORATED<br>400 RESEARCH PARKWAY<br>P. O. BOX 1018<br>MERIDEN, CT 06450-1018 |             |                      | CECIL, TERRY K      |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1723                |                  |

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/764,717             | BLAZE ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Mr. Terry K. Cecil     | 1723                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 9-25-2005.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8, 10-12, 14-31, 33-35, 37-45 is/are pending in the application.

4a) Of the above claim(s) 16-24, 28 and 38-43 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-8, 10-12, 14, 15, 25-27, 29-31, 33-35, 37, 44 and 45 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 6-29-2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group 1a, claims 1-8, 10-12, 14-15, 25-27, 29-31, 33-35, 37 and 44-45, is acknowledged. Claims 16-24, 28, and 38-43 are withdrawn. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)) and has been made FINAL.

### ***Drawings***

*Because of applicant's amendments to the drawings and the specification, the drawing and specification objections of the prior office action are withdrawn.*

### ***Claim Rejections - 35 USC § 112***

*Because of applicant's amendments to the claims, the 112 rejections of the prior office action are withdrawn. However, the following now apply.*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8, 10-12, 14-15 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are indefinite because of the following reasons:

- Applicant has amended the means plus function limitation of the attachment means (claim 1) from a "means for facilitating *the lifting...*" to the broader "a means for facilitating *the movement...*". As stated in the last office action, the equivalent structure in the specification

for the original “means for” limitation is the eyebolt, hoist ring, or lifting eye of page 7, lines 19-25 or equivalents thereof. However, it is not clear what additional structures and equivalents are encompassed by the broader scope of the “means for” limitation—as amended (perhaps those taught in the U.S. Pat. No. 5,607,584, incorporated by reference? or maybe the threaded portion of the attachment member?).

- The balance of the claims are rejected since they suffer the same defects as the claims from which they depend.

***Claim Rejections - 35 USC § 102/103***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

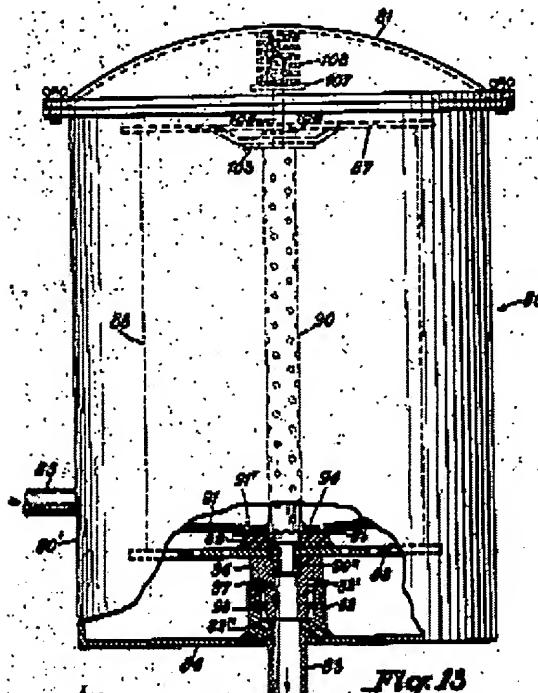
- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 5, 12 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wiegand (U.S. 3,231,094). Wiegand teaches an apparatus for handling filter disks including a post (pipe 90+90a) having filter disks (figure 2)



slid thereon (col. 3, lines 20-21). The post includes an attachment member (figure 17) "operatively" connected to an end thereof and an adaptor member (96+97) "operatively" connected to the opposite end thereof. The attachment member includes a means for facilitating movement of the handling apparatus—i.e. 107, see col. 8, lines 44-47. This rejection falls under a 102/103 rejection since—as explained above—the scope of the "means plus function" limitations is unclear. Therefore, element 107 is taken as being an equivalent of the "means for facilitating movement" since the element is used for moving the handling apparatus; or alternately, element 107 is taken as an obvious variant in which the skilled man would be motivated to substitute with element 107 since Wiegand teaches the benefit of removing the entire filter insert from the housing for replacement of the filter cartridge [the disks] (see col. 7, lines 34-37; and col. 9, lines 41-44). The adaptor member (96+97) is "operatively" connected to the post at an aperture in the adaptor member

upper surface. As shown in figure 13, the outer surface of the adaptor member includes a sealing structure 98 for removably sealingly interfacing with the inner surface of the liquid outlet (82) [as in claims 1, 5 and 15]. Also, the adaptor member includes female treads formed therein for engaging the corresponding threads of the post member second end [as in claim 12].

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

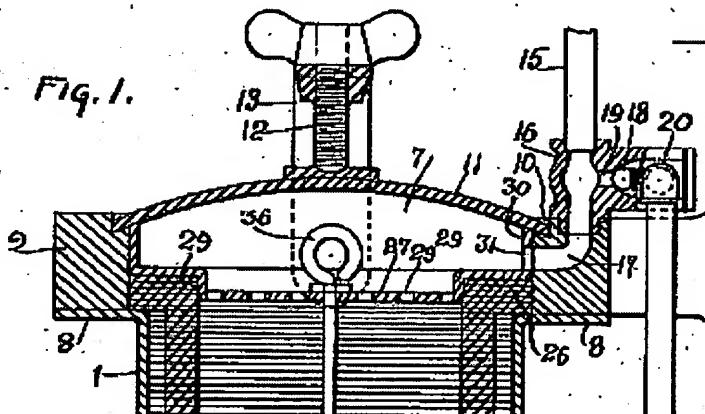
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 6, 10-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiegand in view of Blackmore (U.S. 1,701,556). These claims add the limitations of the apparatus being configured to support at least 14 or 56 filter disks or for the attachment member to comprise an eyebolt and threads to engage the end of the center post. Wiegand, as expanded above teaches a plurality of filter disks but doesn't mention a number; he also teaches an attachment member and threads attached to the post end but does not teach an eyebolt. However, such is taught by Blackmore. Blackmore also teaches an oil filter including a plurality of disks

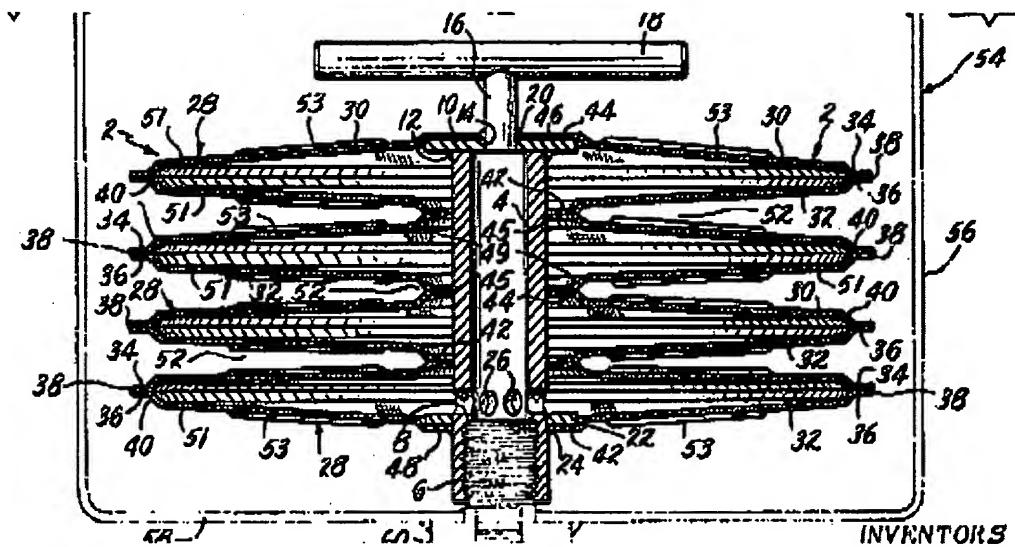
24 (more than 56) [as in claims 10-11]) that also includes an attachment means including an eyebolt 36 [as in claim 6]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention for the top of 105 of the attachment member of Wiegand to include the eyebolt 36 of Blackmore, since Blackmore teaches the benefit of facilitating removal of the filter assembly by e.g. a hook so that the hands of the operator will not be soiled (page 1, lines 78-81). It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to design the apparatus to be able to support a certain number of disks (e.g. 14 or 56) depending upon the amount of fluid to be filtered or other process conditions. As for claim 14, the exact shape (e.g. semi-circular) of the aperture (discharge passage) is within ordinary skill and is insufficient per se for patentability of the claim. For example in uses requiring a small volumetric flow rate, it is obvious for the discharge passage to have a smaller cross-sectional area of a semicircle. In addition, applicant admits that apertures having a semi-circular shape are known (page 4, first paragraph).



8. Claims 2-3, 25-26, 29, 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiegand, in view of Blackmore as applied above and in further view of FR 2,460,154,

hereinafter “154”. As expanded above ‘965 in view of Blackmore teaches the limitations of claims 29, 33-35 and 37 but does not teach a motor-powered lifting apparatus. As shown in figure 5, ‘154 teaches a motor powered lifting apparatus [as in claims 2-3 and 25-26]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the lifting apparatus of ‘154 in the invention of the modified ‘965, since ‘154 teaches the benefit of removing a filtering apparatus from a housing for the servicing/replacing of the filter units.

9. Claims 8 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiegand as modified in the rejections of claims 1 and 25 above and in further view of Boggs et al. (U.S. 3,666,107).



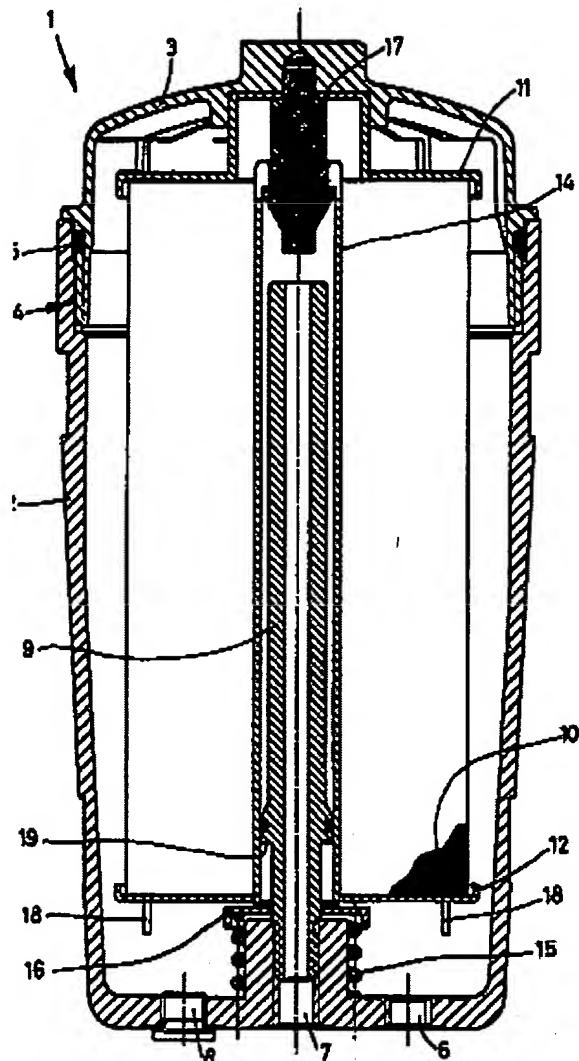
Boggs teaches a lifting member (10+16+18) welded to a center post [as in claims 8 and 31]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the modified means for lifting of Wiegand to be welded to the post member thereof as in Boggs, since Boggs teaches the benefit of a means for lifting a filter disc assembly.

10. Claims 7 and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Wiegand as modified in the rejections of claims 1 and 25 above and in further view of Lock (U.S. 2,630,610). Lock teaches a swiveled hook ring. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the ring of the modified Wiegand to be swiveled as in Lock since such would allow the connection to the lifting means to be rapidly made.

11. Claims 4 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiegand in view of Blackmore and '154 as applied above and in further view of Broyden et al. (US 4,635,903). Broyden teaches a manually operated chain hoist [as in claims 4 and 27]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the lifting means to be manually operated since Broyden does not require a lot of physical strength to operate the chain hoist and the operator can precisely raise the load to a particular height without worrying about accidentally dropping the load.

12. Claims (1, 5, 10-12, 14-15) and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19541965C1, hereinafter '965 in view of Blackmore (U.S. 1,701,556) and Wiegand. '965 teaches an oil filter including a plurality of filter disks 10 clamped between end

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‘965 doesn’t teach the post member (17+14)

to include an attachment means including a means for moving the apparatus. However

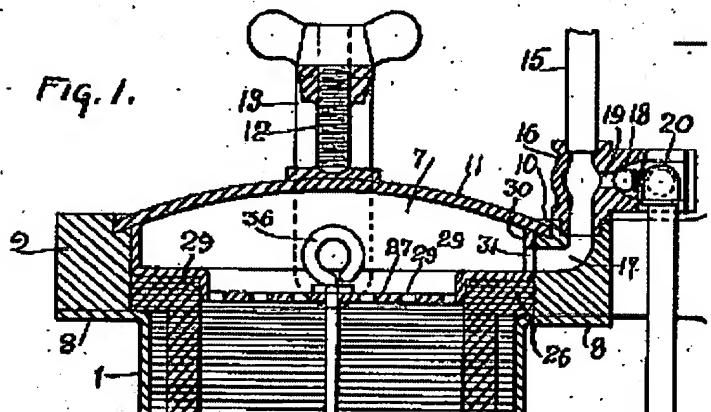
such is taught by Blackmore. Blackmore also teaches an oil filter including a plurality of disks

24 (more than 56) [as in claims 10-11]) that also includes an attachment means including a

means for facilitating lifting (36) of the disks [as in claim 1]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention for the top of the post member (17+14) to include the eyebolt 36 of Blackmore, since Blackmore teaches the benefit of

plates 11 and 12 and including a center post member (17+14) wherein the disks are slidable thereon. The apparatus is configured such that elements 17, 14, 10, 11, 12 and 9 are lifted out of the casing 2 in unison for servicing/replacing the disks. At such time the cover plate 11 is removed and the disks are slid off the post member. Elements 9 and 16 are considered to be the claimed “adapter member” that is “operatively connected” to the post member 14 whenever the disks are “operatively positioned” [as in claim 1].

FIG. I.



facilitating removal of the filter assembly by e.g. a hook so that the hands of the operator will not be soiled (page 1, lines 78-81). As for claim 5, upon removal of the filter assembly from the casing 2, the limitations thereof are met. As for claim 15, the disks can slide over the end of the post member. As for claim 14, the exact shape (e.g. semi-circular) of the aperture (discharge passage) is within ordinary skill and is insufficient per se for patentability of the claim. For example in uses requiring a small volumetric flow rate, it is obvious for the discharge passage to have a smaller cross-sectional area of a semicircle. As for claim 12, Blackmore teaches the idea of the end of a post 32 to be threaded to attach to a complimentary threaded portion. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the end of the adapter 9 of '965 to be threaded and to engage a complementary threaded opening (7), since Blackmore teaches the benefit of rigidly securing the assembly. As for claim 44, upon modification the attachment means would be smaller than the aperture of the filter disks. '965 doesn't teach the adapter member to include a seal on the outer surface thereof but such is taught by Wiegand (as explained above). It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the adapter member of Wiegand in the modified '965, since Wiegand teaches the benefit of removing the entire filter insert from the housing in order to replace the filter disks.

13. Claims (2-3, 25-26, 33-35, 37) and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over '965, in view of Blackmore and Wiedgand, as applied above and in further view of FR 2,460,154, hereinafter "154". As expanded above '965 in view of Blackmore teaches the limitations of claims 33-35, 37 and 45 but does not teach a motor-powered lifting

apparatus. As shown in figure 5, '154 teaches a motor powered lifting apparatus [as in claims 2-3 and 25-26]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the lifting apparatus of '154 in the invention of the modified '965, since '154 teaches the benefit of removing a filtering apparatus from a housing for the servicing/replacing of the filter units.

***Response to Arguments***

14. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

***Conclusion***

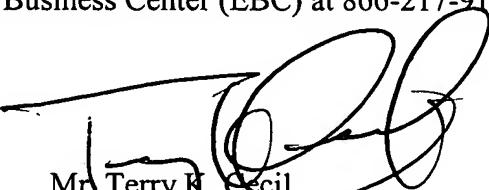
15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151 if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is (571) 273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mr. Terry K. Cecil  
Primary Examiner  
Art Unit 1723

TKC  
December 2, 2005